

Compu-DAWN

Software Solutions
for Public Safety.

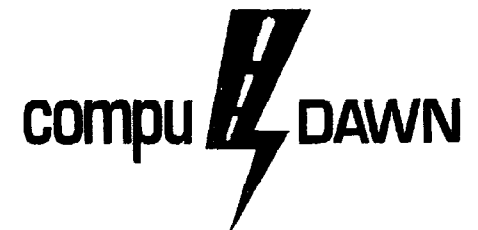
A Fully Integrated
Information Management System.



Our Mission

- To be the premier provider of Software Solutions and Communications Technology for Public Safety.

- ◆ Law Enforcement
- ◆ Fire
- ◆ EMS



The U.S. Market

- The U.S. Market 21,860 police departments
- 35,690 fire departments
- All EMS and other public safety agencies

Fewer than 20% are computerized



High Tech Cops

Bringing the resources of headquarters to patrol cars

Computer and Software Technology

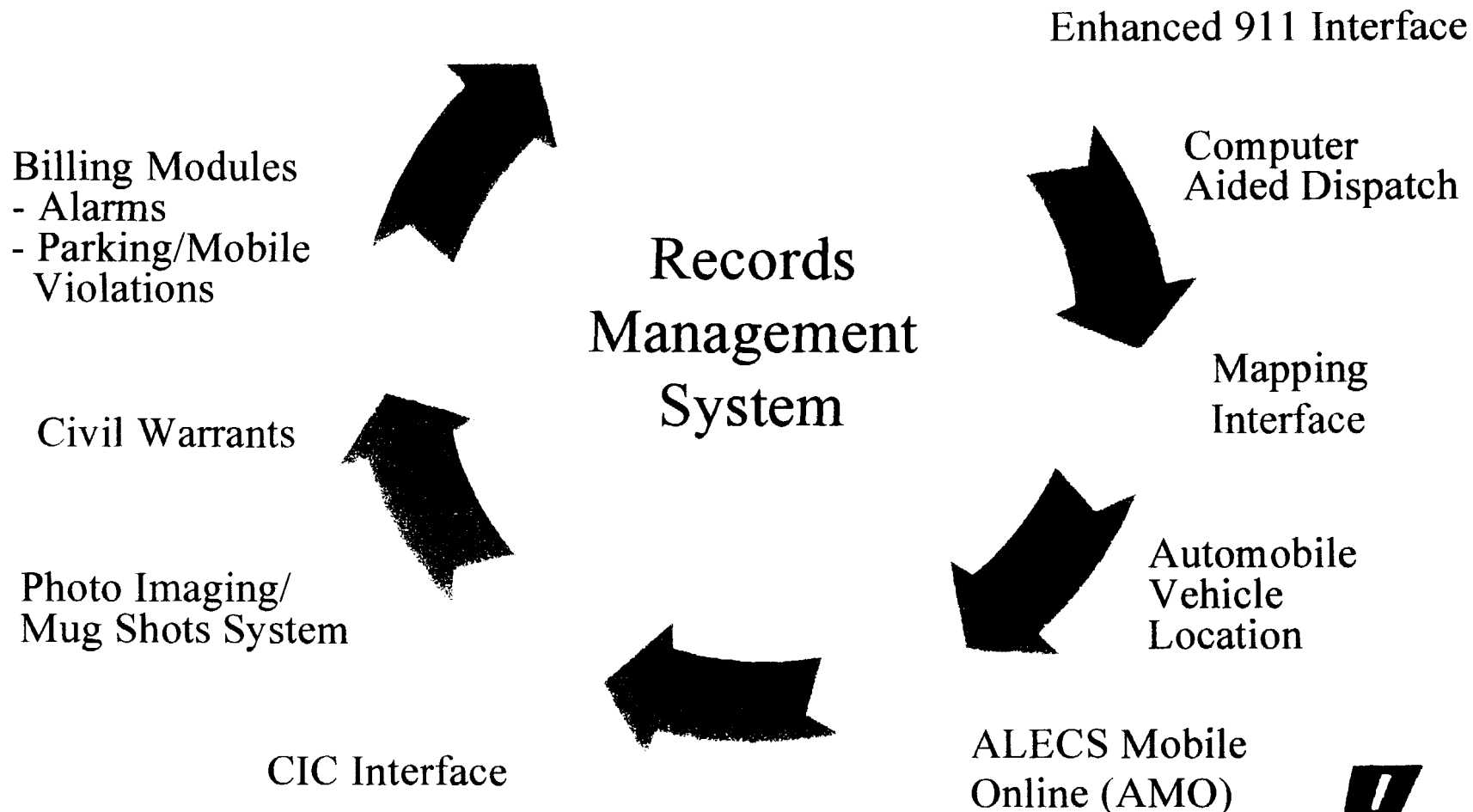
+ Wireless Communication

= **Reduced Crime**

Source: Mobile Officer - July 1995

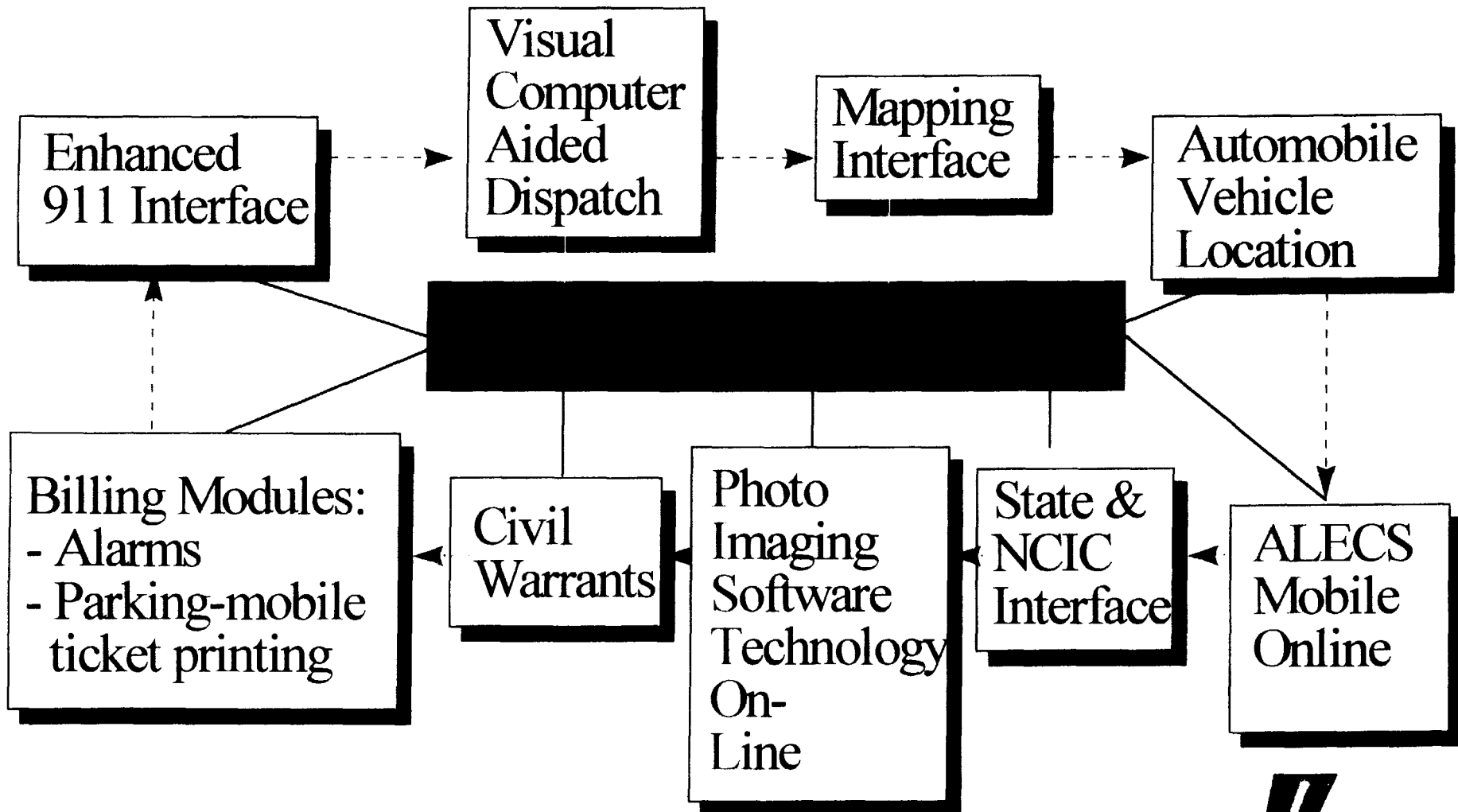


ALECS 2000 Modules



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ALECS 2000™ Modules




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ALECS 2000TM

Advanced Law Enforcement Computer Solutions



- State-of-the-art software solutions designed for public safety
- 14+ modules
- All modules interface with existing systems.
- Modules can be combined to form fully integrated solutions.

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ARMS

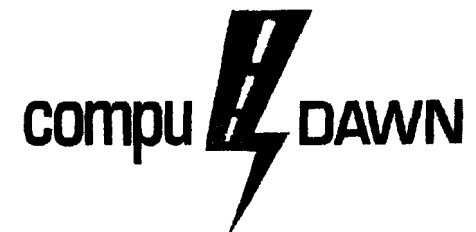
Advanced Records Management System

- Organizes, processes and retrieves data in *real-time*.
- Provides information to field personnel so they can make informed decisions and quick responses.
- Information includes: person's history, location history, warrants, hazards, firearm permits, orders of protection, alarm/emergency contacts, property registration, etc.



E-911 Interface

- Imports caller's name, number and location data from the telephone company.
- Retrieves any historical information on the caller or the location.
- Increased accuracy, decreased key strokes, decreased response time and increased safety.



VCAD

Visual Computer Aided Dispatch

- Identifies available units.
- Assists the dispatcher in assigning resources promptly.
- Obtains information from database.
- Provides the nearest cross streets, hydrant locations, etc.
- Date/time/event numbers automatically stamped.
- Checks hazard, warrant, firearm permit, alarm, order of protection and history from databases.
- Gives call back number.
- Touch screen, full color and user friendly.



V-CAD

Visual Computer Aided Dispatch

Compu DAWN V-CAD System
File Options Help

FR01
AVAL
13:56

FR02
AVAL
13:56

FR03
AVAL
13:56

EMS1
AVAL
13:56

101
AVAL
02:18

102
AVAL
21:40

103
AVAL
19:41

104
AVAL
13:56

201
AVAL
13:56

FR01
DPAK
23:41

FR01
DISP
22:15

102
ARRI
02:08

202
AVAL
13:56

203
AVAL
13:56

Unit	Status	Els Time	Priority	Type	Event #	Units
FR01	DISP	22:15	5	DISTURBANCE/HOU	96-000401	COAS
102	DPAK	20:24	1	ROBBERY/H	97-000017	FLOW
FR01	DPAK	23:41	1	ROBBERY/H	97-000017	FLOW
203	DPAK	20:47	5	DISTURBANCE/HOU	96-000401	COAS
102	ARRI	02:08	5	DISTURBANCE/HOU	96-000401	COAS
ENG1	STAR	02:41	5	DISTURBANCE/FBI	96-000403	
AMB1	LVHS	02:40	5	DISTURBANCE/HOU	96-000401	COAS

102
DPAK
01:41

ENG1
STAR
02:41

Selected Event#
96-000403

Command:

VCAD

Visual Computer Aided Dispatch

Emp: DAWN VCAD System 2

Tools

K101
AVAL
13:28

K102
AVAL
13:28

K103
AVAL
13:28

11
AVAL
13:28

13
AVAL
13:28

17
AVAL
13:28

26
AVAL
13:28

31
AVAL
13:28

32
AVAL
13:28

33
AVAL
13:28

3161
AVAL
13:28

12
AVAL
13:28

13
AVAL
13:28

60
AVAL
13:28

NEW NEW

Event #: _____ Date: 11/18/96 Time: 1328 How Received: E911

Location: TOM'S BAKERY Cross Street: _____

Address: 44 Street: FIRST STREET Apt Number: _____ Post: _____

City, Town, Village: CARMEL Agency: CARM Plate #: _____ State: _____

Event Type for Police: E911 Priority: _____ ☐ Police ☐ Fire ☐ EMS

Desc. For Police Type: _____

Name: JOEL SMITH Role: CALLER

Address: 44 Street: FIRST STREET Apt #: _____ AC: 914 Phone: 432-7096

City, Town, Village: CARMEL State: NY

Command: _____

PrePlan Units Warnings Notes History GeoInfo

File Hold E911_1

Cancel Mail Pv E911_2

Mapping Interface

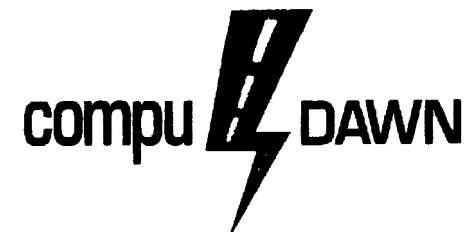
- VCAD automatically displays location of event and available units.
- Provides quicker and more effective resource deployment.
- The dispatcher can ***zoom*** the map to give greater details to responding units.
- Locations of various past events can be displayed providing crime analysis.



AVL

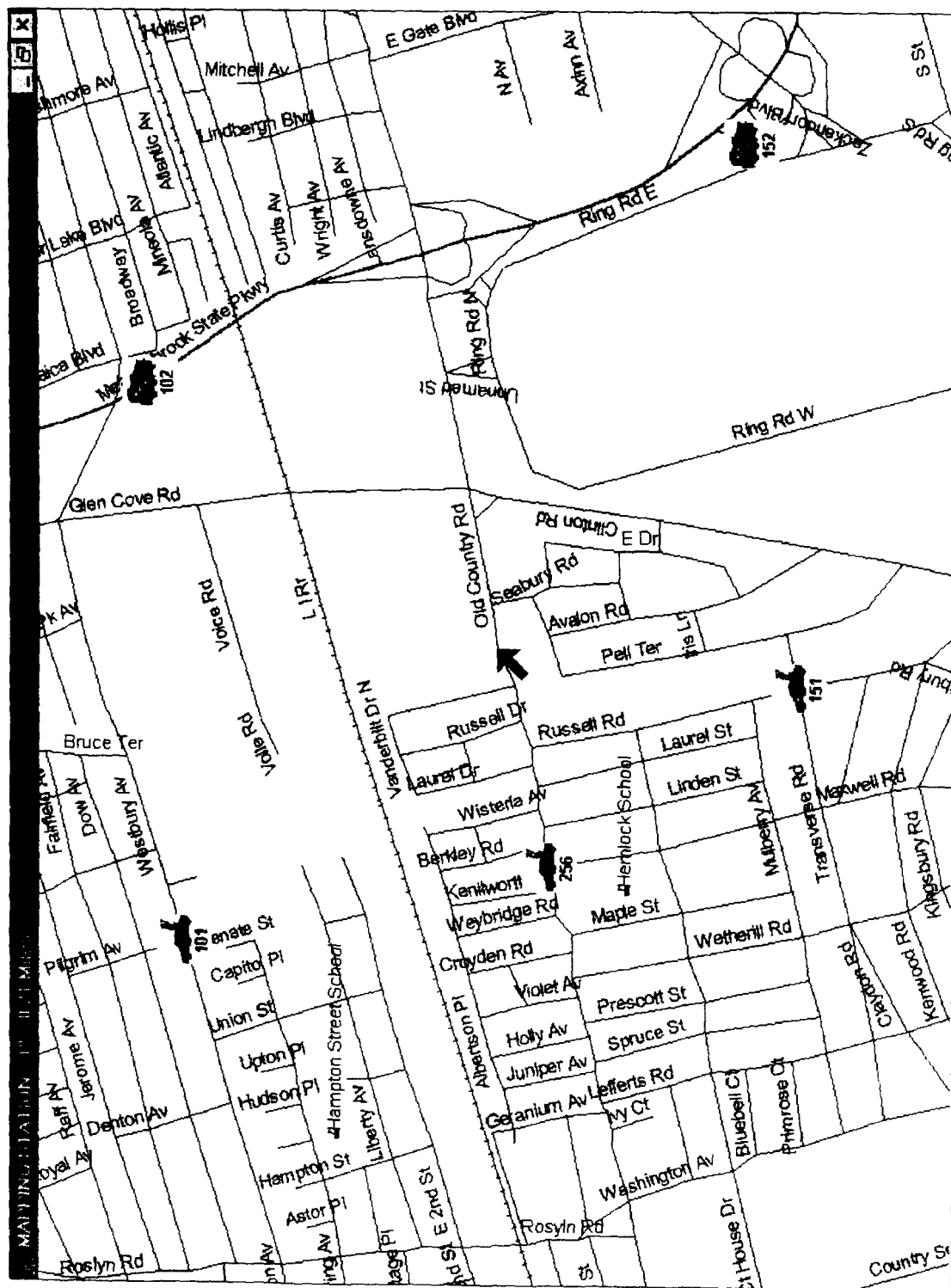
Automatic Vehicle Location

- Automatically transmits location of vehicles and event to headquarters where they are tracked visually.
- Gives management and dispatchers easy visual representation.
- Provides real-time response of vehicles to an event.
- Increases officer safety and productivity.
- Provides management with enhanced supervisory capabilities.



AVL - Mapping

Automatic Vehicle Location



AMO

ALECS Mobile On-line

A Virtual Office in the Car

- All files can be accessed and updated mobile.
- Messages and replies are transmitted as data; provides security and privacy.
- Text to speech and voice recognition commands.
- Photo imaging/mug shot of persons can be transmitted individually or broadcast for rapid distribution.
- DMV, state accident and incident reports can be completed and filed from the field.
- Increased officer safety and time in the field.



Local, State & NCIC Interface

- Interface to crime information databases from all workstations.
- Users are provided menu options for various inquiries: driver's information, criminal history, etc.
- Delivers responses to an AMO laptop, no need for dispatcher intervention, thus providing faster response to in-field requests.
- Frees dispatcher's time, while simultaneously giving Police Officer important information.
- Increases traffic summonses and arrests.



PISTOL

Photo Imaging Software Technology On-Line




- Enables capturing images of prisoners, property, accident and crime scenes, etc. and links them instantly to the ALECS database.
- Utilizing AMO, photos can be transmitted to the laptop computer for identification, searches, etc.
- Photos relating to a specific event can be linked, retrieved, or printed on demand, with field notes attached.
- Searches for match and physical characteristics.
- Automatic photo arrays.
- Decreases crime/impersonation and false I.D. utilization.

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PISTOL

Photo Imaging Software Technology On-Line

View Line Up



Date: 01/10/97 Time: 1644
Location: COMPU DAWN POLICE

General Line Up #: 51

Case #: 96-00001

LineUp # in the case
7

Print

Load

Refile

Exit

Information

Comments

Civil Warrants

- Fully integrated with ARMS™.
- Provides listing of warrants by name or number.
- Alerts officer if a person has an outstanding warrant.
- Provides accuracy and saves time resulting in increased revenues.



Billing Modules

False Alarm

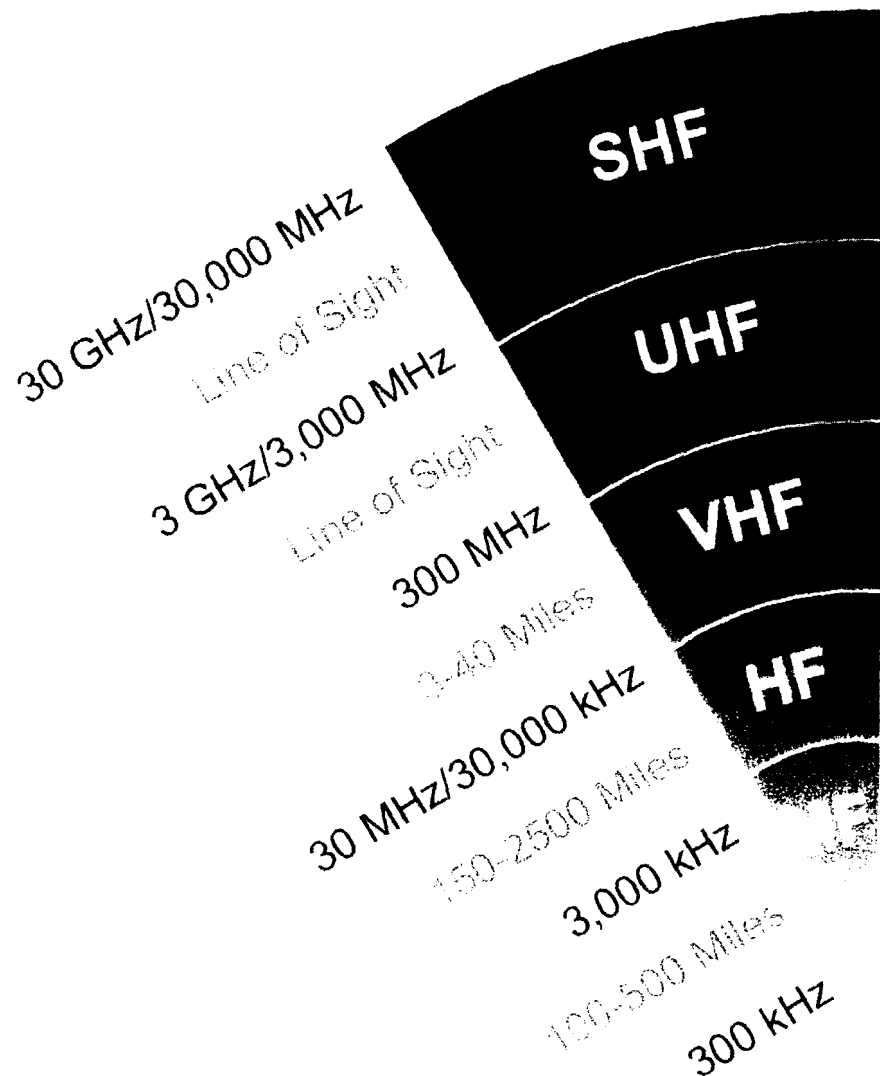
- Automates the billing process for false alarms.

Parking/Traffic Violations

- Integrated with the persons file by name and license number.
- Payments and balances are maintained.
- Dunning and scofflaw letters are created.
- Information can be transmitted to the state DMV.
- Increases efficiency and revenue for municipality.



Typical Users of the Spectrum



Satellite Systems (500 MHz)
Radars (10- 30 MHz)


Channel 20 506-512 (6 MHz; 6000 kHz)
Taxi (25 kHz)

Channel 5 72-86 (6MHz;6000 kHz)
Police, Fire, Ambulance Radio (20 kHz)

Citizens Band Radio (10 kHz)

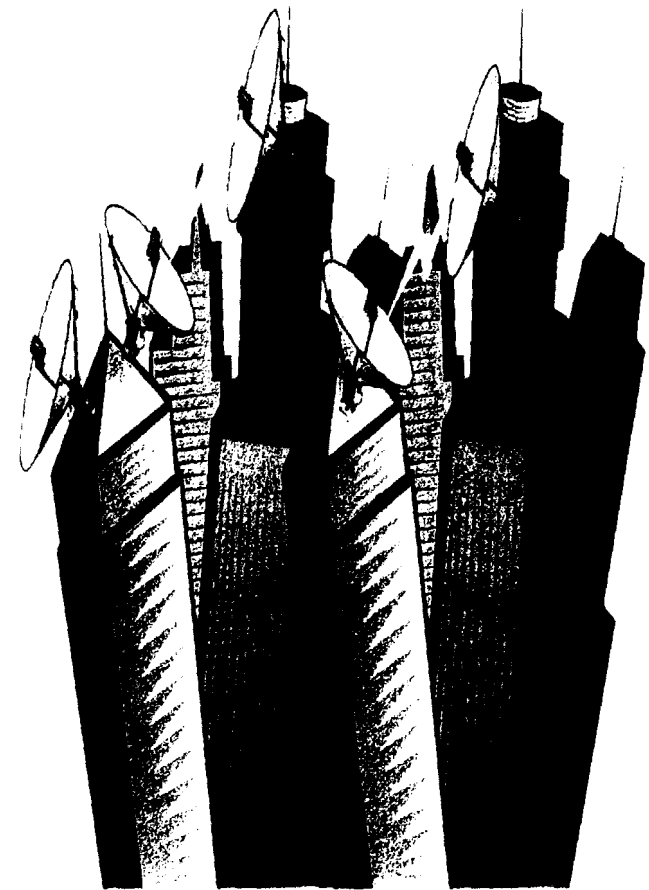
Voice Radio (3kHz)

Commercial Broadcast Band (540 - 1600 kHz)

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Spectrum Congestion Analysis

- ◆ Most Existing Public Safety bands congested; Communication bands are the most cluttered.
- ◆ More requests in the Public Safety bands.
- ◆ Spectrum Congestion causes huge coordination problem.
- ◆ Problems are compounded by sharing within same bands.



Airwaves for Public Safety

FREQUENCY 100 hertz 10,000 1 MHz 10^2 MHz 10^4 MHz 10^6 MHz 10^8 MHz 10^{10} MHz 10^{12} MHz 10^{14} MHz 10^{16} MHz

BAND

USE

Alternating Current

AM Radio

Heat Lamps

Sun Lamps

VHF Television
channels 2-6

FM radio
stations VHF Television channels 7-13

UHF television frequencies

FREQUENCY 25 MHz 100 200 300 400 500 600 700 800 900

BAND

NON-
FEDERAL
PUBLIC
SAFETY
CHANNELS

25-50 MHz
Includes 315
channels for
wide area
coverage,
mostly by state
highway patrols.

156-174 MHz
The first public safety frequencies were allocated
here; includes 242 channels.

220-222 MHz
10 channels recently
allocated, but little suitable
equipment is available.

470-512 MHz
Some unused TV channels
are available.

450-470 MHz
74 Channels.

**806-821 MHz and
851-866 MHz**
70 Channels.

**821-824 MHz and
866-869 MHz**
230 Channels
allocated in 1987.

Compu-DAWN, Inc. (formerly *Coastal Computer Systems, Inc.*) is the developer and installer of the **ALECS 2000™** suite of Public Safety Solutions. System configurations range from small PC based single and multi-user systems to large PC-LAN or UNIX platforms. **Compu-DAWN** solutions will be tailored to meet state and other geographic specific reporting and communications requirements.

ALECS 2000™ Modules include:

- **Records Management System**
- **ALECS Mobile Online (AMO™)**
- **E-911 Interface**
- **Visual Computer Aided Dispatch (VCAD™)**
- **Mobile Data Communications**
- **State Information Systems Interface**
- **Integrated Mapping/AVL**
- **False Alarm Billing**
- **PISTOL™ (Photo Imaging System Technology On Line)**
- **Parking Violations**

Mobile Data Communications - AMO™ - ALECS MOBILE ONLINE

This module allows the use of laptop computers in vehicles to communicate with the host computer by way of public or private radio network or CDPD (cellular digital packet data) network. The mobile units can perform all functions as terminals in police headquarters - entering or editing data, retrieving current information, etc. Data entered in the laptop is immediately stored in the database, and any information in the database can be immediately displayed on the laptop's screen.

Records Management System

ALECS 2000™ records management tools organize information to increase efficiency, aid investigations and improve management control by providing:

- Comprehensive incident-based records system fulfilling state and Federal UCR requirements
- Labor-saving administrative aids help for scheduling, electronic messaging, work assignments and personnel tracking
- System-wide person, property/evidence, vehicle and geo-based address files eliminate the need for duplicating entries from module to module
- Case/Arrest tracks all information related to criminal incidents. Custom inquiries allow selective retrieval of data (patterns, suspects, etc.)